

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

A F JAW

In re application of:

Group Art Unit: 2617

DONALD L. BRODIGAN, ET AL.

Examiner: Annan Q. Shang

Serial No.: 09/514,033

Filed: February 25, 2000

For: METHOD AND SYSTEM FOR PROVIDING INTERACTIVE PROGRAMMING

Attorney Docket No.: 1589 (USW 0563 PUS)

# APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents Commissioner for Patents U.S. Patent & Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief in support of the Appeal from the final rejection of claims 1-11 in the Office Action mailed on June 1, 2005 for the above-identified patent application.

### I. REAL PARTY IN INTEREST

The real party in interest is Qwest Communications International Inc., a corporation organized and existing under the laws of the state of Delaware, and having a place of business at 1801 California Street, Denver, Colorado 80202.

12/02/2005 EFLORES 00000015 09514033

01 FC:1402

500.00 OP

## CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8 (FIRST CLASS MAIL)

I hereby certify that this paper, including all enclosures referred to herein, is being deposited with the United States Postal Service as first-class mail, postage pre-paid, in an envelope addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, U.S. Patent & Trademark Office, P.O. Box 1450, Alexandria, YA 22313-1450 on:

November 29, 2005

Date of Deposit

Jeremy J. Curcuri
Name of Person Signing

romy of Curum

#### II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences known to the Appellants, the Appellants' legal representative, or the Assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### III. STATUS OF CLAIMS

Claims 1-11 are pending in this application. Claims 1-11 have been rejected and are the subject of this appeal.

### IV. STATUS OF AMENDMENTS

No amendment has been filed subsequent to final rejection. Arguments only were filed on August 12, 2005. An Advisory Action was mailed on September 23, 2005.

### V. SUMMARY OF CLAIMED SUBJECT MATTER

The invention relates to bi-directional transmission of data over a broadband network in real-time. Page 1, lines 4-5. It is desirable to be able to allow for delivery of specified video content to designated users that can be responded to on a real-time and interactive basis. Page 1, lines 15-17.

As defined by independent claim 1 and exemplified in Figures 1 and 2, the invention comprehends a method for providing personalized interactive programming over a data path. The data path extends between a service provider 12 and a set top box 30. The service provider 12 is connected to a data network 22 and has an address. A communication path is established between a broadband digital terminal 24 and the set top box 30. The broadband digital terminal 24 is connected to the data network 22. The service provider 12 broadcasts video through the broadband digital terminal 24 to the set top box 30. (Figure 2, block 52.) A private data packet is sent in addition to the broadcast video from the service provider 12 over the network 22 and through the broadband digital terminal 24 to the set top

box 30. The packet contains application interface information for the service provider 12 and contains the service provider address. (Figure 2, block 54.) An impulse pay-per-view communication path is established between the set top box 30 and the service provider 12 based upon the address to allow interactive programming using the application interface information between the service provider 12 and the set top box 30 to personalize the broadcast programming. (Figure 2, block 56.) Page 2, lines 13-23; page 4, lines 2-17; page 5, lines 19-28.

As exemplified in Figure 1, local broadcast server 14 or Internet service provider 16 (ISP) on Internet 15 that desires exposure and the ability to engage in bidirectional communication with subscribers to the broadband network may send a private data packet (PDP) transmission to the head end 10 (at service provider 12) as shown at exemplary MPEG2 source 18. Page 4, lines 18-25; page 7, lines 12-20.

As defined by independent claim 5 and exemplified in Figures 1 and 2, the invention comprehends an interactive video/data system for interacting with the destination address on a network. The system comprises a broadcast source 18 at the destination address for transmitting a private data packet over a private virtual channel on the network. The packet contains application interface information and the destination address. The system further comprises a broadband digital terminal 24 receiving the packet over the private virtual channel (ATM PVC 20) from the broadcast source 18. A set top box 30 receives the packet from the broadband digital terminal 24, and cooperates with the broadband digital terminal 24 and the broadcast source 18 to establish an impulse pay-per-view data path extending from the set top box 30 to the broadband digital terminal 24, and over the private virtual channel (ATM PVC 20) to the broadcast source 18 at the destination address. The data path allows application interface information to be communicated in real-time between the set top box 30 and the broadcast source 18. Page 2, lines 13-23; page 4, lines 2-25; page 7, lines 7-20.

### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-10 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Hendricks et al. (U.S. Patent No. 6,201,536).

Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hendricks et al. (U.S. Patent No. 6,201,536) in view of Mimura et al. (U.S. Patent No. 6,557,031).

### VII. ARGUMENT

## A. Claims 1-10 Are Patentable Under 35 U.S.C. § 102(e) Over Hendricks et al. (U.S. Patent No. 6,201,536)

In the Final Action, the Examiner has rejected claims 1-10 under 35 U.S.C. § 102(e) as being anticipated by Hendricks. Appellants believe that the claimed invention is patentable over Hendricks.

Hendricks describes a network manager for cable television system head ends. Hendricks relates to managing and coordinating the reception of various programming and control signals at a head end. Hendricks does mention the accommodation of system services, including video on demand and the generation of standard and custom menus. However, Hendricks fails to suggest the claimed invention.

Hendricks does mention operations center 202 where program packaging and control information are created and then assembled in the form of digital data. Hendricks also discusses flexibility in the packaging, for example, packaging the same programs into different categories and menus. Operation center 202 simply creates and assembles program packaging and control information.

The Examiner has equated operations center 202 to the claimed service provider. Even if operations center 202 is considered to be a service provider within the broadest meaning of the term, Hendricks still fails to suggest the claimed invention.

Note that in Figure 1 of Hendricks, operations center 202 supports network manager 214 over terrestrial link 218. On the other hand, local feeds 224, ATM 226, and file server 215 provide data to signal processing equipment 209. While operations center 202 may support operations, there is no suggestion that operations center 202 is sending private data packets in addition to broadcast video over the network, through the broadband digital terminal, to the set top box where an impulse pay-per-view communication path is established between the set top box and the service provider as recited by claim 1.

Regarding the claimed impulse pay-per-view communication path, the Examiner refers to column 24, lines 12-33 of Hendricks. Again, this portion of Hendricks does discuss IPPV/VOD, and refers to Figure 8. Figure 8 reveals file server 215, as well as block 234 receiving ATM and local feeds. To the extent that Hendricks does describe an IPPV/VOD path, there is certainly no suggestion of establishing such a path with the operations center 202, which the Examiner has called a service provider, let alone establishing the path in the particularly claimed way recited by claim 1.

Hendricks does mention IPPV/VOD, however, there is no suggestion of establishing the IPPV communication path in the way specifically claimed by claim 1 where the service provider sends a private data packet in addition to the broadcast video over the network and through the broadband digital terminal to the set top box, and the packet contains API information and the service provider address. To the extent that the Examiner attempts to equate operations center 202 to the claimed service provider, Appellants contend that Hendricks fails to suggest an IPPV communication path to operations center 202, let alone suggest the establishment of such a path in the particularly claimed way. After all, Hendricks

fails to suggest an IPPV communication path to operations center 202, and little attention is given to external ATM and local feeds received by the head end.

In any light, Hendricks fails to suggest the claimed invention. Hendricks does mention custom menus that may be generated for a specific subscriber. However, the claimed invention is not simply a custom menu. The claimed invention involves a combination of various features.

For the reasons given above, claim 1 is believed to be patentable.

Claims 2-4 are dependent claims and are also believed to be patentable.

Claim 5 is an independent claim for a system of the invention and is also believed to be patentable. Claim 5 recites similar subject matter as independent claim 1 including the use of the private data packet containing application interface information and the destination address as well as establishing an impulse pay-per-view data path extending from the set top box to the service provider.

Claims 6-10 are dependent claims and are also believed to be patentable.

In the Advisory Action, the Examiner again discusses the various system services provided by the network manager in Hendricks. The Examiner again refers to operations center 202 as a service provider, and notes in the Advisory Action that "the delivery of the requested interactive programs can be spooled directly from OC 202." This portion of Hendricks does mention that the network manager supports operations center supplied VOD programs. However, to the extent that the operations center is being considered by the Examiner as a service provider, there is still no suggestion of sending a private data packet and establishing the IPPV communication path between the set top box and the service provider as

recited by claim 1. This part of Hendricks only mentions program spooling by the operations center support.

In the Advisory Action, the Examiner summarizes that Hendricks teaches establishing a virtual channel path, which enables the OC 202, HE 208 and a specific STT 220 to establish a communication path for delivering interactive programming and menus based on requests made interactively by the STT 220. However, these general teachings regarding interactive programming and menus still fail to suggest the claimed invention. As explained above, to the extent that the Examiner deems OC 202 as a service provider, there is no suggestion of the particularly claimed approach using the private data packet and IPPV communication path between the set top box and the service provider based upon the service provider address to allow interactive programming using the application interface information. The VOD related discussions in Hendricks involves connections between the head end and a set top terminal through a concatenated cable system 210. If this IPPV path in Hendricks is considered, then Hendricks fails to suggest other various aspects recited by claim 1, for example, the claimed aspect of the service provider broadcasting video through the broadband digital terminal to the set top box (exemplified in Figure 1 by provider 12, ATM network 22, broadband digital terminal 24, and set top box 30).

For the reasons given above, claims 1-10 are believed to be patentable.

B. Claim 11 Is Patentable Under 35 U.S.C. § 103(a)
Over Hendricks et al. (U.S. Patent No. 6,201,536)
In View Of Mimura et al. (U.S. Patent No. 6,557,031)

Claim 11 is a dependent claim and also believed to be patentable.

The fee of \$500.00 as applicable under the provisions of 37 C.F.R. § 41.20(b)(2) is enclosed. Please charge any additional fee or credit any overpayment in connection with this filing to our Deposit Account No. 02-3978.

Respectfully submitted,

DONALD L. BRODIGAN, ET AL.

Registration No. 42,454 Attorney for Appellants

Date: November 29, 2005

BROOKS KUSHMAN P.C.

1000 Town Center, 22nd Floor Southfield, MI 48075-1238

Phone: 248-358-4400 Fax: 248-358-3351

Enclosure - Appendices

#### VIII. CLAIMS APPENDIX

1. A method for providing personalized interactive programming over a data path, the data path extending between a service provider and a set top box, the service provider being connected to a data network and having an address, the method comprising:

establishing a communication path between a broadband digital terminal and the set top box, the broadband digital terminal being connected to the data network and the service provider broadcasting video through the broadband digital terminal to the set top box;

sending a private data packet in addition to the broadcast video from the service provider, over the network and through the broadband digital terminal to the set top box, the packet containing application interface information for the service provider and containing the service provider address; and

establishing an impulse pay-per-view communication path between the set top box and the service provider based upon the address to allow interactive programming using the application interface information between the service provider and the set top box to personalize the broadcast programming.

- 2. The method for providing personalized interactive programming over a data path of claim 1 wherein sending the private data packet is performed by inserting the private data packet between frames of a video transmission.
- 3. The method for providing personalized interactive programming over a data path of claim 2 wherein the video transmission is prerecorded programming that is transmitted on demand.
- 4. The method for providing personalized interactive programming over a data path of claim 2 wherein the video transmission is real-time programming.

Appendix Page 1

5. An interactive video/data system for interacting with a destination address on a network, the system comprising:

a broadcast source at the destination address for transmitting a private data packet over a private virtual channel on the network, the packet containing application interface information and the destination address;

a broadband digital terminal receiving the packet over the private virtual channel from the broadcast source; and

a set top box receiving the packet from the broadband digital terminal, and cooperating with the broadband digital terminal and the broadcast source to establish an impulse pay-per-view data path extending from the set top box to the broadband digital terminal, and over the private virtual channel to the broadcast source at the destination address, the data path allowing application interface information to be communicated in real-time between the set top box and the broadcast source.

- 6. The interactive video/data system of claim 5 further comprising a television receiving video transmissions from the set top box.
- 7. The interactive video/data system of claim 5 further comprising an optical network unit between the broadband digital terminal and the set top box.
- 8. The interactive video/data system of claim 7 further comprising a network interface device between the optical network unit and the set top box.
- 9. The interactive video/data system of claim 5 wherein the private data packet is inserted between frames of a video transmission.
- 10. The interactive video/data system of claim 5 wherein the broadcasting source is a local server.

Appendix Page 2

11. The interactive video/data system of claim 5 wherein the broadcasting source is an Internet service provider.

Appendix Page 3